

## **ABSTRACT**

A laser system for generating at least two output beams comprising a laser multimode diode member (101) emitting a light beam with an intensity distribution comprising a plurality of spatial modes. A dual feedback cavity is provided by first and second selection means (108, 110, 111) for selecting corresponding to one of said plurality of spatial modes on opposite sides of the optical axis; and first and second reflective members (106, 112) where the laser diode member and the reflective members define a dual cavity and are adapted to reflect corresponding feedback fractions of the selected parts of the emitted light beam back into the laser diode member and to produce respective output beams (113, 114).